

SUMMARY OF SUBCOMMITTEE MEETING

DATE: December 19, 2001

TO: Ross Dunfee, Steering Committee Chairman
Tony Barrett, Department of Ecology

COPY: Steering Committee Members and Consultant Team

FROM: Doug Busko, DEA and Jim St. John, DEA

SUBJECT: **Summary of Stormwater Manual Subcommittee Meeting**
Moses Lake Conference Center
December 13, 2001 9:00 am – 2:00 pm

PROJECT: EASTERN WASHINGTON STORMWATER MANAGEMENT
Stormwater Management Technical Manual *and*
Model Municipal NPDES Phase II Stormwater Program

Subcommittee Meeting Attendees:

Dan Gatchalian – Yakima County	Khalid Marcus – Yakima County
Gary Beeman – WSDOT	Duane Calvin – City of Yakima
Steve Worley – Spokane County	Steve Hansen – City of Spokane
Jocelyne Gray – JUB Engineers	David Sypher – City of Chelan
Ryan Lyyski – City of Ellensburg	Jim St. John – DEA
Greg Lahti – WSDOT	Doug Busko – DEA
Nancy Aldrich – City of Richland	Steve King – RH2 Engineering
Ron Anderson – CWHBA	Beth Kochur – HDR Engineering
Michele Brich – Tri-Cities Homebuilders	
Shelley Willson – City of Yakima	
Pete Hobbs – City of Yakima	

PURPOSE OF MEETING:

This meeting was held to gather the core subcommittee members and at-large members for:

- ❖ Further discussion of the manual outline
- ❖ Review of geotechnical issues relating to infiltration BMP's
- ❖ Presentation of the first draft of a requirements matrix

AGENDA FOR THIS MEETING:

1. Introductions, review of agenda, review of summary from 11/29/01 meeting
2. Discussion of manual outline
3. Geotechnical issues
4. Latest information on hydrologic issues
5. Comparison of other manuals that have been reviewed
6. Review of first draft of requirements matrix
7. Lunch, with presentation by Tony Barrett on drywells
8. Next meeting: date, time, place, and topics

BRIEF SUMMARY OF PROCEEDINGS:

1. Doug Busko welcomed everyone and reviewed the day's agenda along with the summary from the 11/29/01 subcommittee meeting.
2. Jim St. John reviewed the revised outline for the manual. Steve Worley broke the manual into its essential elements:
 - a. Introduction
 - b. When a drainage plan is required: matrix, development and redevelopment
 - c. Minimum requirements (areas to be addressed): ESC, water quality, flow control, source control
 - d. Design of BMP's to meet minimum requirements

The group decided that many of the "special requirements" listed in the outline should be left to local jurisdictions for regulation, including floodplains, critical drainage areas, drainage basin plans, basement flooding, and geologically hazardous areas. Jim explained that the manual needs to meet the requirements of several regulations including NPDES Phase II, state water quality standards, Washington drainage law, ESA, and GMA.

3. Doug shared with the group the conversation he had had with Jim Harakas of GeoEngineers regarding the issues surrounding the design and use of infiltration facilities in Eastern Washington. Jim said that there are no readily available regional maps of infiltrative soils in Eastern Washington, and that it would be a significant effort to create them. The group suggested that we somehow utilize the SCS soil surveys as the main source of geotechnical guidance in the manual. It may be possible to create guidelines that correlate the Hydrologic Soils Groups with the appropriate BMP's.
4. Discussion moved to water quality treatment guidelines in the manual. There was general consensus not to use 72% of the 2-year storm as the water quality storm (Western Washington's standard). Instead, the group suggested that the water quality storm be based on a percentage of the mean annual precipitation. Mel Schaefer will need to investigate isopluvial characteristics and average periods between storms in each region to help the group decide what the guidelines for the water quality storm will be. Water quality "hotspots" such as convenience stores, service stations, and fast food restaurants may need special attention in the guidelines, although there was some doubt in the group about breaking out certain uses with additional requirements.

The group took up discussion of several facets of flow control. Flow control will not be required for infiltration BMP's although water quality treatment still will be. One position on flow control is that it is

mainly a flood control issue and, as such, should be left to the local jurisdictions for regulation. However, it was pointed out that increased peak flow rates can lead to streambank erosion, at which point flow control becomes a water quality issue as well. Also, there was general agreement that if a development has direct discharge to a large waterbody then flow control will not be required.

5. Tony Barrett gave a presentation on drywells that had previously been prepared by DOE in early 2000. The appropriate use of drywells can be evaluated through several factors including infiltration volumes, depth to groundwater, type of soils surrounding the drywell, and types of contaminants. Tony described the Susceptibility Rating system DOE devised to provide a numerical basis for evaluating drywell installation, which incorporates the factors listed above. Drywells at risk of being contaminated by chemical spills or discharges are prohibited outright. It was noted that Arizona DEQ has done substantial research into the area of drywells.

Tony mentioned that for groundwater regulations the point of measurement for quality is at the interface with the groundwater level, but for the UIC program it is measured at the point of discharge. Ecology is in the process of revising the UIC to get it consistent with related federal and state rules. See their website:

<p><i>http://www.ecy.wa.gov/laws-rules/activity/wac173218.html</i></p>

Note: The best philosophy is to design drywells so you can safely assume they won't pollute the groundwater.

6. For the **next meeting** (Moses Lake Conference Center on **January 10, 2002** from 9am to 2pm):
 - ❖ Draft sections on Source Control and Erosion Control will be reviewed
 - ❖ Further discussion of thresholds and minimum requirements
 - ❖ Revised matrices
 - ❖ Presentation of list of local issues that will not be addressed in the manual
 - ❖ Begin the list of key issues which are “white paper” topics for the technical manual